

Translation

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PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference CDR147916228	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/JP2003/008634	International filing date (day/month/year) 08 July 2003 (08.07.2003)	Priority date (day/month/year) 14 August 2002 (14.08.2002)
International Patent Classification (IPC) or national classification and IPC G03F 7/004, G03H 1/02, C08G 65/18		
Applicant KONICA MINOLTA MEDICAL & GRAPHIC, INC.		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☐ (sent to the applicant and to the International Bureau) a total of \_\_\_\_\_ sheets, as follows:

☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of \_\_\_\_\_ (indicate type and number of electronic carrier(s)) readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

☒ Box No. I Basis of the report

☐ Box No. II Priority

☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

☐ Box No. IV Lack of unity of invention

☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

☒ Box No. VI Certain documents cited

☐ Box No. VII Certain defects in the international application

☒ Box No. VIII Certain observations on the international application

Date of submission of the demand 17 February 2004 (17.02.2004)	Date of completion of this report 08 November 2004 (08.11.2004)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):

- ☒ The international application as originally filed/furnished
- ☐ the description:
- pages \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the claims:
- pages \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_, as amended (together with any statement) under Article 19
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the drawings:
- pages \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (specify): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (specify): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (specify): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (specify): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 8-16

because:

☐ the said international application, or the said claims Nos. \_\_\_\_\_  
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. \_\_\_\_\_  
are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. \_\_\_\_\_ are so inadequately supported  
by the description that no meaningful opinion could be formed.

☒ no international search report has been established for said claims Nos. 8-16

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the  
Administrative Instructions in that:

the written form

☐ has not been furnished

☐ does not comply with the standard

the computer readable form

☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with  
the technical requirements provided for in Annex C-bis of the Administrative Instructions.

☐ see Supplemental Box for further details.

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**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)

Claims

5-7

YES

Claims

1-4

NO

Inventive step (IS)

Claims

YES

Claims

1-7

NO

Industrial applicability (IA)

Claims

1-7

YES

Claims

NO

## 2. Citations and explanations (Rule 70.7)

Document 1: JP, 10-168165, A (JSR Corp.), 23 June, 1998 (23.06.98), claim 1, [0013]-[0039], [0053], [0059]-[0068], [0080]-[0090], & EP, 848294, A1, & US, 5981616, A1

Document 2: JP, 2000-221870, A (Daiwa Can Co.), 11 August, 2000 (11.08.00), [0021]-[0026] (Family: none)

Document 3: JP, 2002-62411, A (Toppan Printing Co., Ltd.), 28 February, 2002 (28.02.02), claims 1-6, [0031], full text, all drawings (Family: none)

Document 4: JP, 8-262700, A (K.K. Kansai Shingijutsu Kenkyujo, presently named KRI, Inc.), 11 October, 1996 (11.10.96), full text, all drawings (Family: none)

Document 5: JP, 6-19040, A (Nippon Sheet Glass Co., Ltd.), 28 January, 1994 (28.01.94), claims 1 and 2, [0017]-[0021], & US, 2002/0004172, A1

Document 6: JP, 2001-109360, A (Director General of Agency of Industrial Science and Technology), 20 April, 2001 (20.04.01), claim 8, [0011]-[0021], & EP, 980025, A1

The subject matters of claims 1-4 do not appear to be novel or to involve an inventive step, since they are described in document 1 (claim 1, [0013]-[0039], [0053], [0059]-[0068], [0080]-[0090], etc.) that is a family member of a document cited in the ISR, and document 2 ([0021]-[0026]) and document 3 (claims 1-6, [0031], full text, all drawings) respectively cited in the ISR.

The subject matter of claim 5 does not appear to involve an inventive step in view of documents 1 and 2 and a well-known technique. Document 1 ([0070], [0077]) and document 2 ([0026]) describe the use of an adequate curing agent or the like, and it is considered easy to employ, as required, a well-known curable matrix, etc.

The subject matters of claims 6 and 7 do not appear to involve an inventive step in view of the inventions described in documents 1-6. Document 1 ([0070]) and document 3 ([0043]) describe the addition of a silane coupling agent. On the other hand, containing an alkoxysilane and using an organic-inorganic composite as a matrix are well known in view of document 4 cited in the ISR and documents 5 and 6 that are family members of documents cited in the ISR.

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## Box No. VI Certain documents cited

## 1. Certain published documents (Rule 70.10)

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
JP 2002-236440 A [E, X]	23.08.2002	09.02.2001	

## 2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day/month/year)	Date of written disclosure referring to non-written disclosure (day/month/year)

**Box No. VIII Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The description of claim 5, "the matrix-forming precursor can form a binder matrix owing to at least one polymerization reaction selected from epoxy-amine stepwise polymerization, ..., isocyanate-amine stepwise polymerization," refers to a function, and what is particularly referred to is unknown. Furthermore, this is not sufficiently supported by the specification.